Notice of Allowability	Application No.	Applicant(s)	Applicant(s)	
	10/604,208	DOWNTON, GEOFF		
	Examiner	Art Unit		
	Matthew J. Smith	3672		
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate commendation is	in this application. If not include nunication will be mailed in due of	ed course. THIS	
1. This communication is responsive to the Information Disclo	osure Statement filed 30 Ja	anuary 2006.		
2. The allowed claim(s) is/are 1,2 and 4.				
 Acknowledgment is made of a claim for foreign priority unally all b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	been received. been received in Applicat	ion No	ion from the	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		le a reply complying with the req	uirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subminformal patent application (PTO-152) which give			OTICE OF	
 5. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the deposit of the depos	son's Patent Drawing Reviews S Amendment / Comment (84(c)) should be written on the header according to 37 Consist of BIOLOGICAL MATERIAL MATERIA	or in the Office action of the drawings in the front (not the FR 1.121(d). TERIAL must be submitted. N	·	
and the Examiner of Comment regarding (CEC) (Civilent)				
Attachment(s)	5 D Nation of		. 450)	
 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 		Informal Patent Application (PTC Summary (PTO-413),	⊬ 10 <i>2)</i>	
3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No	o./Mail Date s Amendment/Comment		
Paper No./Mail Date 30Jan06 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	<u></u>	s Statement of Reasons for Allo	wance	
	9. Other		Wallce	

Allowable Subject Matter

Claims 1, 2, and 4 are allowed.

The following is a statement of reasons for the indication of allowable subject

matter: The prior art presented fails to anticipate or suggest a method of predicting the

operation of a steerable drilling system by calculating an ideal reachability ellipse using

an equation that includes the weight on bit, bit rate of penetration, mud pressure, mud

flow, bit revolutions per minute, bit torque, bit inclination, build and turn gain, build and

turn demand, cross-coupling values, build, and turn.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew J. Smith whose telephone number is 571-272-

7034. The examiner can normally be reached on T-F, 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Bagnell

Supervisory Patent Examiner

Art Unit 3672

MJS MJ3 25 May 2006